

## **DETAILED ACTION**

### ***Specification***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "**said**," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Drawings***

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **9**. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: **Fig 7a, Fig. 9 and FIG. 11**. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Figure **7a-7c** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 5 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 and 5 of copending Application No. 10/591,116. Although the conflicting claims are not identical, they are not patentably distinct from each other because while the claims both describe a resin embedded within another resin, wherein the first resin composes at least 80% and the second resin no more than 20%, and that the resins are located along an axis of symmetry. In regards to the positioning of the resin layers, although the copending claims disclose specific limitations regarding the positioning, the specific object of the copending claims would clearly fall within the scope of the present claims. Also while the instant application requires a variable distance between the functional layer and the axis of

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symmetry the copending application is silent as to this regard, but does not fix in place a distance between the functional layers and the axis of symmetry. One of ordinary skill in the art would be motivated to move the functional layers closer or further from the axis of symmetry depending on what part of the article or object they want to have the function that is provided by the functional layer. One of ordinary skill in the art at the time of the invention would be motivated to include the extra functional layer of the copending application because this would increase the functional ability imparted by the functional layer to the object.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 4 directed to an invention not patentably distinct from claim 1 of commonly assigned 10/591,116. Specifically, see above paragraph.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/591,116, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claims 1, 3 and 4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of copending Application No. 10/591,127. Although the conflicting claims are not identical, they are not patentably distinct from each other because while the instant application requires a variable distance between the functional layer and the axis of symmetry the copending application is silent as to this regard, but does not fix in place a distance between the functional layers and the axis of symmetry. One of ordinary skill in the art would be motivated to move the functional layers closer or further from the axis of symmetry depending on what part of the article or object they want to have the function that is provided by the functional layer. The copending application requires that the functional layer be at least 50 microns from the surface of the dose whereas the instant application is silent in this regard, one of ordinary skill in the art at the time of the invention would be motivated to move the functional layer to at least 50 microns from the surface of the dose because this would imprison the functional layers at depths such that it would limit the risk that the functional layer become exposed on the surface of the object during blow molding and the like. While the copending claims are silent regarding the functional layer being present in 20 vol% or less it has been shown that absent a showing of criticality with respect to "concentration of the functional resin" (a result

effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "resin concentration" through routine experimentation to values, including those presently claimed in order to achieve "a structurally stable object with adequate functional properties". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3 and 4 are directed to an invention not patentably distinct from claims 1 and 2 of commonly assigned 10/591,127. Specifically, see above paragraph for reasoning.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/591,127, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The term "thin" in claims 1 and 5 is a relative term which renders the claim indefinite. The term "thin" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

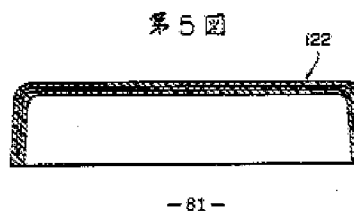
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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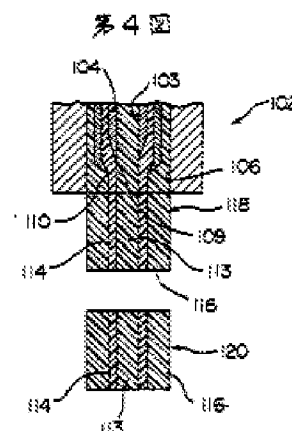
the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi (JP 02098415).

12. In regards to claims 1, 4 and 5 Kawaguchi teaches a multi layer object for use with compression molding, as well as the object formed from compression molding the



original object (abstract and constitution as provided by Applicant's). Kawaguchi shows an embodiment in Figure 4 in which the inside resin layer, 114, has a varied distance from the axis of symmetry, and the inner resin layer is surrounded by the outer resin layer, 116. Kawaguchi et al. are silent regarding the concentration of the various layers, however it has been shown that absent a showing of criticality with respect to "resin concentrations" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "resin concentrations" through routine experimentation to values, including those presently claimed in order to achieve "firm stable dose and multilayer container". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Figure 5 shows an article wherein the article has an imprisoned inner layer which has variable distances from the axis of symmetry. It is also obvious to vary the concentrations of the resins given that the first resin provides structure to the dose and the functional layers provide properties, i.e. gas barrier





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properties, to the dose, it would have been obvious to one of ordinary skill in the art to choose amounts of the first resin and the functional layer, including those presently claimed, depending on the desired properties of the dose.

13. In regards to the limitation "for the realization of multilayer objects by compression molding" Examiner points out that this is an intended use statement. It has been determined that where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation (See MPEP 2111.02 and *Kropa v. Robie*, 187 F.2d at 152, 88 USPQ2d at 480-81).

14. In regards to claim 4, figure 4 shows an embodiment wherein there are two different inner layers.

15. In regards to claim 5, Examiner is treating it as a product by process claim, specifically regarding the term "obtained by compression molding". It has been shown that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process (MPEP 2113 and *In re Thorpe*, 777F.2d 695, 698, 227 USPQ 964, 966).

16. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al. (JP 02098415 in view of Akiyama (US 2002/0182351)).

17. As stated above Kawaguchi et al. teach an article made of one resin with 2 layers of a functional resin embedded within and varied distances between the inner layer and the axis of symmetry. However they are silent regarding the functional resin being a layer comprising an adhesive layer / a barrier layer / an adhesive layer.

18. Akiyama et al. teach an article which has a barrier layer (the functional layer) embedded within (paragraph 0044 and Fig. 7). Akiyama et al. further teach that the barrier layer is actually a barrier layer in between two adhesive layers (paragraph 0106).

19. One of ordinary skill in the art at the time of the invention would be motivated to modify the article of Kawaguchi et al. with that of Akiyama et al. because the layer of Akiyama et al. offers firm adherence between the two films (paragraph 0061).

20. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al (JP 02098415) in view of Langecker (US 4,883,630).

21. As stated above Kawaguchi et al. teach an article made of one resin with 2 layers of a functional resin embedded within and varied distances between the inner layer and the axis of symmetry. However they are silent regarding the process of cutting and adjusting the flow of the plastics.

22. Kawaguchi et al. teach that the layers are formed by the extrusion of the layers into a mold as well as a cutting step to form the dose (constitution as provided by Applicant's).

23. Langecker teaches a method for the making of a mold article comprised of a thermoplastic resin (column 1 lines 5-20) including embodiments wherein one layer surrounds the next layer (column 3 lines 62-64).

24. In regards to claim 6 and 7 Langecker teaches that rate of flow of the plastics into the mold can be varied. Langecker teaches that the optimum material distribution is taking place while the changing of the flow rates is going on (column 3 lines 42-64), one of ordinary skill in the art would recognize that to keep the optimum material distribution when the flow of one material is decreased the other has to be increased to make up the difference. Langecker also teaches phase opposition in claim 1 where it is taught that the resins are only injected one at a time, therefore when one is at full flow, the other is at no flow, and in a phase opposition.

25. In regards to claim 8 Langecker teaches a method which involves the injecting of at least one functional layer and at least one structural layer at different times in order to encapsulate one of the resins. Langecker also teaches the varying of the volume of the mold in proportion to the resin injected (claim 1).

26. While Kawaguchi et al. and Langecker are silent regarding pairing the cutting step with the variation in flow, it would have been obvious to one of ordinary skill in the art at the time of the invention to do this so that one obtains doses consistent in composition and interior design which would then lead to consistent articles made from said doses.

27. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Kawaguchi et al. with the process of Langecker

because the process of Kawaguchi et al. would benefit from the confidence provided by the process of Langecker that an exact material distribution in the mold cavity is ensured (column 2 lines 59-64).

28. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al. (JP 02098415) in view of O'Mara (US 4,390,487)

29. As stated above Kawaguchi et al. teach an article made of one resin with 2 layers of a functional resin embedded within and varied distances between the inner layer and the axis of symmetry. However they are silent regarding the process as well as flowing adjusting the flow of the plastics.

30. Kawaguchi et al. teach that the layers are formed by the extrusion of the layers into a mold and varying of the layers so that the inner layer is at different distances from the axis of symmetry (constitution as provided by Applicant's).

31. O'Mara teaches a process for making an outer layer of plastic around a core of plastic material (column 1 lines 5-10).

32. O'Mara teaches that this is accomplished by the injection of the inner plastic material into a core area of a previously formed plastic material (column 4 lines 19-63), after this is done the extruder is turned off and then the outer layer (conductive layer in the reference) is extruded over the opening to completely enclose the inner layer.

33. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Kawaguchi et al. with the process of O'Mara because the process of Kawaguchi et al. would benefit from the limiting of the handling of the

device, and therefore saving money due to the less amount of work involved, as well as eliminate further steps which errors can be introduced (column 2 lines 20-25) of the process of O'Mara.

### ***Conclusion***

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kimura (US 4,940,557) teaches methods for manufacturing molded members which has a resin contained within another resin and a method of forming the members which would result in the change in direction and shape of the inner resin, followed by a cutting step, however Kimura is silent regarding axis of symmetry as well as varying the flow of the resins. In regards to the search report FR 2 520 288, and it's corresponding US application (US 4,390,487) teach a method for forming a multilayer resin wherein the first resin is at least initially encapsulated in the second resin. This could possibly be used as part of a 103 reference. In regards to the other French reference cited in the search report (FR 2 180 831) Examiner was unable to obtain a translation of this reference and therefore can not fully understand how it relates to the current patent. The reference EP 1 208 955 also listed on the search report, could be used as a possible 103 reference in regards to the claims containing a method which comprises a variable mold cavity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is

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(571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikow  
Examiner  
Art Unit 1794

/Callie E. Shosho/

Supervisory Patent Examiner, Art Unit 1794